

were obtained while I was there, were deposited in the L. N. H. collection. My own most noteworthy contribution, I think, was the *Bombycilla garrula*, which I shot near the church." Here we have the assertion of one of the most successful students of Natural History ever on this ground, that his proceedings were "*straggling and unscholarly*." Such men in after life see how they might have worked to much greater advantage. Shall we take means to profit by their experience, or continue to make the same mistakes? The next extract is from a New York political editor, once enthusiastic in the study of Carices, and from whom in college days we received many valuable specimens. "I was appalled," says he, "at the thought of your referring your Botany to me. I have forgotten and abandoned all that I once knew of it. Ask me the varying shades of New York politics, and I will tell you a Hard, Soft, or Hunker; Woolly, Silver Gray, or Sewardite; Hindoo, Jonathan, or Choctaw; bogus or genuine K. N., Barnburner, or Freesoiler, and describe the close resemblances or wide differences to the minutest shade. But *Carex* No. 77 I shall not know from *Carex* No. 87, nor could I determine the relative scientific weight of the two Botanists you mention."

We propose now to gather up the fragments—to publish in the Quarterly a catalogue of the objects of Natural History in this town, and we hope also to put in Jackson Hall every specimen mentioned here, properly labeled. Addenda will be published from time to time as they are made. And when the catalogue approaches completeness, we hope some one will have time and money to describe all the objects, so that with the specimens it can become a complete manual for the Natural History of this town. For this purpose we need the assistance of all students who have time and inclination to collect. Every specimen should be checked upon this catalogue, and any specimen found not recorded here, should be entered on a copy kept by the Society, and be deposited in the collection. We need also money to carry out this object. If we would have all our specimens accurately named, especially in the lower order, we must apply to those who make them *specialities*. They ought not to be asked to do such work for nothing. They are overburdened with labor of this kind. We need a thousand dollars worth of books now to enable us to do what we fairly ought among ourselves. To publish such a manual as we have spoken of, would cost more than its sale would amount to in many years; and unfortunately very few are able to work without pay, to say nothing of paying out money to meet expenses of publication. We might mention several other things for which money is needed to carry on the

department of Natural History, but as we do not hold to presenting too many things at once, lest we discourage, we simply say to the friends of the College, that Natural History has been strangely forgotten in the giving of money. Provision is made for only five weeks study of Botany, and three or four weeks each for Mineralogy and Geology; and that so much has been done, is because a large number of students have in these studies taken extra work and taxed themselves. They have been greatly encouraged in their independent work by the munificent donations of Mr. Jackson. They have made good use of their money, and the amount of work they have done is highly honorable to them; but a silent rebuke to the College for doing so little. Shall we have the means of doing more, or announce that Natural History in this College must depend upon the extra labor and voluntary contributions of the students?

NOTE.—In the following Catalogue of Plants, no attempt has been made to enumerate the lower orders of the Cryptogamous series. And in some other orders, especially the compound Flowers and Grasses, many additions may be expected. The Catalogue of the genus *Carex* was furnished by Rev. Dr. Dewey of Rochester University, whose labors on Carices are well known. Those of this town have received his special attention, as his valuable notes which we hope sometime to publish, show. This genus is given according to Wood's Botany. The other plants according to Gray's Manual, Ed., 1848. They are taken in the order they occur in that book without annexing the name of the original describer as is desirable in a completed Catalogue. The numerals indicate the numbers of the natural orders. The list of shells has been prepared by Mr. S. H. Scudder, and that of Reptiles by Mr. John E. Darby, to both of whom I am much indebted, as also to several others who have assisted me in various ways. Every specimen in the whole catalogue has been examined by myself excepting where the names of other persons are given as authority. Among the plants, I have entered a few that have merely been introduced on College ground, and some found in Pownal, Vt., (marked P.) that may most of them be found within this town. Among the ~~animals~~ <sup>plants</sup> and birds, some are mentioned that are only rare visitors. These are not indicated because they are generally such as are known to be rare in every part of the State. The names for the Fauna are those of the Massachusetts or New York State Reports, unless otherwise indicated.

✓ P. A. CHADBOURNE.

## FLORA.

*Phaenogamous Plants.*

|              |    |                     |             |                            |
|--------------|----|---------------------|-------------|----------------------------|
|              | 1  |                     | Dentaria,   | diphylla.                  |
| Atragene,    |    | Americana.          | Arabis,     | Canadensis.                |
| Clematis,    |    | Virginiana.         | Barbarea,   | vulgaris.                  |
| Anemone,     |    | nemerosa.           | Sisymbrium, | officinale.                |
| "            |    | cylindrica.         | "           | Thalianum ?                |
| "            |    | Virginiana.         | Sinapsis,   | arvensis.                  |
| "            |    | Pennsylvanica.      | "           | nigra.                     |
| Hepatica,    | 4  | triloba.            | Draba,      | verna ?                    |
| "            |    | acutiloba.          | Cochlearia, | Armoracia.                 |
| Thalictrum,  |    | anemonoides.        | Camelina,   | sativa.                    |
| "            |    | dioicum.            | Lepidium,   | Virginicum.                |
| "            |    | Cornuti.            | Capsella,   | Bursa-pastoris.            |
| Ranunculus,  |    | aquatilis.          |             | 15                         |
| "            |    | abortivus.          | Viola,      | rotundifolia.              |
| "            |    | recurvatus.         | "           | blanda.                    |
| "            |    | Pennsylvanicus.     | "           | Selkirkii.                 |
| "            |    | repens.             | "           | sagittata.                 |
| "            |    | bulbosus ?          | "           | cucullata.                 |
| "            |    | acris.              | "           | Cucullata, (var. alba.)    |
| Caltha,      |    | palustris.          | "           | Canadensis.                |
| Coptis,      |    | trifolia.           | "           | rostrata.                  |
| Aquilegia,   |    | Canadensis.         | "           | Muhlenbergii.              |
| Actea,       |    | rubra.              | "           | pubescens.                 |
| "            |    | alba.               |             | 16                         |
| "            |    | alba, (var. rubra.) | Lechea,     | major ?                    |
|              | 5  |                     | "           | minor ?                    |
| Leontice,    |    | thalictroides.      |             | 17                         |
| Podophyllum, |    | peltatum.           | Drosera,    | rotundifolia.              |
|              | 6  |                     | Parnassia,  | Caroliniana.               |
| Brasenia,    |    | peltata, (P.)       |             | 18                         |
|              | 8  |                     | Hypericum,  | perforatum.                |
| Nuphar,      |    | advena.             | "           | Corymbosum.                |
|              | 9  |                     | "           | mutilum.                   |
| Sarracenia,  |    | purpurea.           | "           | Canadense.                 |
|              | 10 |                     | "           | Sarthora ?                 |
| Argemone,    |    | Mexicana.           |             | 20                         |
| Chelidonium, |    | majus.              | Saponaria,  | officinalis.               |
| Sanguinaria, |    | Canadensis.         | "           | officinalis, (double var.) |
|              | 11 |                     | Silene,     | inflata.                   |
| Dicentra,    |    | Cucullaria.         | "           | antirrhina.                |
| "            |    | Canadensis.         | "           | noctiflora.                |
| Corydalis,   |    | glauca.             | Lychnis,    | Githago.                   |
|              | 12 |                     | Arenaria,   | stricta.                   |
| Cardamine,   |    | hirsuta.            | "           | serpyllifolia.             |



|              |                         |              |                     |
|--------------|-------------------------|--------------|---------------------|
| Stellaria,   | medea.                  | Rhamnus,     | alnifolius.         |
| "            | longifolia.             | Ceanothus,   | Americanus.         |
| "            | longipes, (R. H. Ward.) |              | 35                  |
| "            | borealis.               | Vitis,       | cordifolia.         |
| Cerastium,   | vulgatum.               | "            | riparia.            |
| Anychia,     | dichotoma, (P.)         | Ampelopsis,  | quinquefolia.       |
| Mullugo,     | verticellata.           |              | 36                  |
| 21           |                         | Polygala,    | sanguinea ?         |
| Portulca,    | oleracea.               | "            | verticillata.       |
| Claytonia,   | Caroliniana.            | "            | Senega, (P.)        |
| 22           |                         |              | 37                  |
| Abutilon,    | Avicennæ.               | Vicia,       | Cracca.             |
| Malva,       | rotundifolia.           | Apios,       | tuberosa.           |
| 23           |                         | Amphicarpa,  | monoica.            |
| Tilia        | Americana.              | Desmodium,   | nudiflorum, (P.)    |
| 24           |                         | "            | acuminatum, (P.)    |
| Linum,       | Virginianum.            | "            | rotundifolium, (P.) |
| 35           |                         | "            | Canadense.          |
| Geranium,    | malculatum.             | Lespedeza,   | violacea.           |
| "            | Robertianum.            | Robinia,     | Pseudacacia.        |
| 26           |                         | "            | viscosa.            |
| Oxalis,      | Acetocella.             | Trifolium,   | arvense             |
| "            | stricta.                | "            | pratense.           |
| 27           |                         | "            | repens.             |
| Impatiens    | pallida.                | "            | agrarium.           |
| "            | fulva.                  | "            | procumbens.         |
| 29           |                         | Baptisia,    | tinctoria, (P.)     |
| Zanthoxylum, | Americanum.             | Cassia,      | Marilandica, (P.)   |
| 30           |                         | Gleditschia, | triacanthos.        |
| Rhus,        | typhina.                |              | 38                  |
| "            | glabra.                 | Prunus,      | Americana.          |
| "            | copallina.              | Cerasus,     | Pennsylvanica.      |
| "            | venenata, (P.)          | "            | Virginiana.         |
| "            | Toxico-dendron.         | "            | serotina.           |
| "            | aromatica, (P.)         | Spiraea,     | salicifolia.        |
| 31           |                         | Agrimonia,   | Eupatoria.          |
| Acer,        | Pennsylvanicum.         | Genm,        | Virginianum.        |
| "            | spicatum.               | "            | strictum.           |
| "            | saccharinum.            | "            | rivale.             |
| "            | dasy carpum ?           | Waldsteinia, | fragarioides.       |
| "            | rubrum.                 | Potentilla,  | Norvegica.          |
| 32           |                         | "            | Canadensis.         |
| Æsculus,     | Hippocastanum.          | "            | argentea.           |
| 33           |                         | "            | fruticosa.          |
| Celastrus,   | scandens.               | "            | tridentata.         |
| 34           |                         | Comarum,     | palustre.           |
| Rhamnus,     | catharticus.            | Fragaria,    | Virginiana.         |

|                 |                     |               |                |
|-----------------|---------------------|---------------|----------------|
| Dalibarda,      | repens.             | 49            |                |
| Rubus,          | odoratus.           | Hydrocotyle,  | Americana.     |
| "               | triflorus.          | Sanicula,     | Canadensis.    |
| "               | strigosus.          | Heracleum,    | lanatum, (P.)  |
| "               | occidentalis.       | Pastinaca,    | sativa.        |
| "               | villosus.           | Archangelica, | atropurpurea.  |
| "               | Canadensis.         | Zizia,        | aurea.         |
| "               | hispidus, (P.)      | Cicuta,       | maculata.      |
| Rosa,           | lucida.             | "             | bulbifera.     |
| "               | rubiginosa.         | Sium,         | latifolium.    |
| Crataegus,      | Oxyacantha.         | "             | lineare.       |
| "               | coccinea.           | Cryptotaenia, | Canadense.     |
| "               | punctata.           | Osmorrhiza,   | brevistylis.   |
| "               | Crus-galli.         | Conium,       | maculatum.     |
| Pyrus,          | arbutifolia.        |               | 50             |
| "               | Americana.          | Aralia,       | racemosa.      |
| Amelanchier,    | Canadensis.         | "             | nudicaulis.    |
|                 | 40                  | "             | hispida.       |
| Decodon,        | verticillatum, (P.) | Panax,        | quinquefolium. |
|                 | 41                  | "             | trifolium.     |
| Epilobium,      | angustifolium.      |               | 51             |
| "               | coloratum.          | Cornus,       | alternifolia.  |
| "               | palustre.           | "             | circinata.     |
| Oenothera,      | biennis.            | "             | sericea.       |
| "               | pumila.             | "             | stolonifera.   |
| Ludwigia,       | palustris.          | "             | paniculata.    |
| Circæa,         | Lutetiana.          | "             | Florida.       |
| "               | alpina.             | "             | Canadensis.    |
|                 | 43                  |               |                |
| Ribes,          | Cynosbati.          |               | 52             |
| "               | hirtellum ? (P.)    | Linnaea,      | borealis, (P.) |
| "               | lacustre.           | Lonicera,     | parviflora     |
| "               | prostratum.         | "             | hirsuta. (P.)  |
| "               | Floridum.           | "             | ciliata.       |
|                 | 45                  | "             | oblongifolia.  |
| Sicios,         | angulatus.          | Diervilla,    | trifida.       |
| Echinocystis,   | lobata.             | Triosteum,    | perfoliatum.   |
| Sedum           | acre, (Wood's Bot.) | Sambucus,     | Canadensis.    |
| Penthorum,      | sedoides.           | "             | pubens.        |
|                 | 47                  | Viburnum,     | nudum.         |
| Saxifraga,      | Virginienis.        | "             | Lentago.       |
| "               | Pennsylvanica.      | "             | dentatum.      |
| Mitella,        | diphylla.           | "             | acerifolium.   |
| "               | nuda, (P.)          | "             | opulus.        |
| Tiarella,       | cordifolia.         | "             | lantancides.   |
| Chrysosplenium, | Americanum.         |               | 53             |
|                 | 48                  | Galium,       | Aparine.       |
| Hamamelis,      | Virginica.          | "             | trifidum       |

|               |                         |               |                         |
|---------------|-------------------------|---------------|-------------------------|
| Galium,       | triflorum.              | Anthemis,     | arvensis.               |
| "             | lanceolatum.            | Achillea,     | Millefolium.            |
| Mitchella,    | repens.                 | Lencanthemum, | vulgare.                |
| Hedyotis,     | cærulea.                | Tanacetum,    | vulgare.                |
|               | 56                      | Artemisia,    | vulgaris, (P.)          |
| Eupatorium,   | purpureum.              | "             | Absinthium.             |
| "             | perfoliatum.            | Gnaphalium,   | decurrens.              |
| "             | aromaticum.             | "             | polycephalum.           |
| Tussilago,    | Farfara.                | "             | uliginosum.             |
| Sericocarpus, | conyzoides.             | Antennaria,   | margaritacea.           |
| Aster,        | corymbosus.             | "             | plantaginifolia.        |
| "             | macrophyllus.           | Ercehthites,  | hieracifolia.           |
| "             | patens.                 | Senecio,      | aureus.                 |
| "             | laevis.                 | Cirsium,      | lanceolatum.            |
| "             | undulatus.              | "             | discolor.               |
| "             | cordifolius.            | "             | arvensis.               |
| "             | multiflorus.            | Onopordon,    | acanthium.              |
| "             | miser.                  | Lappa,        | major.                  |
| "             | simplex ?               | Cichorium,    | Intybus.                |
| "             | carneus.                | Leontodon,    | autumnale ?             |
| "             | puniceus.               | Hieracium,    | Canadense.              |
| "             | prenanthoides ?         | "             | scabrum.                |
| "             | Novæ Angliæ, (2 var.)   | "             | venosum.                |
| "             | Acuminatus.             | "             | paniculatum.            |
| Erigeron,     | bellidifolium.          | Nabulus,      | albus.                  |
| "             | Philadelphicum.         | "             | altissimus,             |
| "             | annuum.                 | Taraxacum,    | Dens-leonis.            |
| "             | strigosum.              | Lactuca,      | elongata.               |
| Solidago,     | squarrosa, (Grey Lock.) | Mulgedium,    | leucophaeum.            |
| "             | bicolor.                | Sonchus,      | oleraceus.              |
| "             | latifolia.              | "             | asper.                  |
| "             | cæsia.                  |               | 57                      |
| "             | Muhlenbergii ?          | Lobelia,      | cardinalis ?            |
| "             | altissima.              | "             | inflata.                |
| "             | odora.                  | "             | spicata.                |
| "             | lanceolata.             | "             | Kalmii, (P.)            |
| Inula,        | Helenium.               |               | 58                      |
| Ambrosia,     | artemisiæfolia.         | Campanula,    | rotundifolia.           |
| Xanthium,     | strumarium.             | Specularia,   | perfoliata.             |
| Rudbeckia,    | triloba.                |               | 59                      |
| "             | hirta.                  | Gaylussacia,  | resinosa.               |
| Helianthus,   | giganteus.              | Vaccinium,    | Oxycoccus.              |
| "             | divaricatus, (P.)       | "             | stamineum, (Grey Lock.) |
| "             | decapetalus.            | "             | Pennsylvanicum.         |
| Bidens,       | frondosa.               | "             | Canadense ?             |
| "             | cernua.                 | "             | vacillans.              |
| "             | chrysanthemoides.       | "             | corybosum.              |
| Maruta,       | cotula.                 | Chigones,     | hispidula.              |

|               |                  |                 |                     |
|---------------|------------------|-----------------|---------------------|
| Gaultheria,   | procumbens.      | Veronica,       | Anagallis ?         |
| Epigæa,       | repens.          | "               | Americana.          |
| Andromeda,    | ligustrina.      | "               | officinalis.        |
| "             | polifolia, (P.)  | "               | serpyllifolia.      |
| "             | calyculata, (P.) | "               | peregrina.          |
| Azalea,       | nudiflora.       | "               | arvensis.           |
| Kalmia,       | latifolia.       | Gerardia,       | tenuifolia, (P.)    |
| "             | angustifolia.    | "               | flava.              |
| "             | glauc, (P.)      | "               | quercifolia.        |
| Ledum,        | latifolium, (P.) | Pedicularis,    | Canadensis.         |
| Pyrola,       | rotundifolia.    | Melampyrum,     | pratense.           |
| "             | asarifolia.      |                 | 70                  |
| "             | elliptica.       | Verbena,        | hastata.            |
| "             | chlorantha.      | "               | urticifolia.        |
| "             | secunda.         | Phryma,         | Leptostachya.       |
| Moneses,      | uniflora.        |                 | 71                  |
| Chimaphila,   | umbellata.       | Mentha,         | viridis.            |
| Hypopitys,    | lanuginosa.      | "               | piperita.           |
| Monotropa,    | uniflora.        | "               | Canadensis.         |
|               | 60               | Lycopus,        | Virginicus.         |
| Prinos,       | verticillatus.   | "               | sinuatus.           |
| Nemopantes,   | Canadensis, (P.) | Collinsonia,    | Canadensis.         |
|               | 62               | Hedeoma,        | pulegioides.        |
| Plantago,     | major.           | Blephilia,      | hirsuta.            |
| "             | lanceolata.      | Monarda,        | didyma.             |
|               | 64               | "               | fistulosa, (P.)     |
| Trientalis,   | Americana.       | Nepeta,         | Cataria.            |
| Lysimachia,   | stricta.         | "               | Glechoma.           |
| "             | quadrifolia.     | Lophanthus,     | nepetoides.         |
| "             | ciliata.         | "               | scrophulariæfolius. |
| "             | lanceolata.      | Pycnanthemum,   | incanum, (P.)       |
| Naumburgia,   | thyrsiflora.     | Clinopodium,    | vulgare.            |
|               | 66               | Prunella,       | vulgaris.           |
| Epiphegus,    | Virginiana.      | Scutellaria,    | galericulata.       |
| Conopholis,   | Americana.       | "               | lateriflora.        |
| Aphyllon,     | uniflorum.       | Lamium,         | mplexicaule.        |
|               | 69               | Leonurus,       | Cardiaca.           |
| Verbascum,    | Thapsus.         | Galeopsis,      | Tetrahit.           |
| "             | Blattaria.       | "               | Ladanum.            |
| Linaria,      | Canadensis.      | Marrubium,      | vulgare.            |
| "             | vulgaris.        |                 | 72                  |
| "             | Elotine.         | Echium,         | vulgare.            |
| Scrophularia, | nodosa.          | Symphytum,      | officinale.         |
| Chelone,      | glabra.          | Lithospermum,   | officinale.         |
| Pentstemon,   | pubescens.       | Echinopspermum, | lappula.            |
| Mimulus,      | ringens.         | Cynoglossum,    | officinale.         |
|               |                  | "               | Virginicum, (P.)    |



|               |    |                   |            |                             |
|---------------|----|-------------------|------------|-----------------------------|
|               | 73 |                   | Polygonum, | convolvulus.                |
| Hydrophyllum, |    | Virginicum.       | "          | clinode.                    |
| "             |    | Canadense.        | "          | dumetorum.                  |
|               | 76 |                   | Fagopyrum, | esculentum.                 |
| Calystegia,   |    | seprium.          | Rumex,     | Hydrolapathum.              |
| Cuscuta,      |    | Gronovii.         | "          | obtusifolius, (R. H. Ward.) |
|               | 77 |                   | "          | crispus.                    |
| Datura,       |    | Stramonium.       | "          | Acetosella.                 |
| Solanum,      |    | Dulcamara.        |            | 87                          |
|               | 78 |                   | Sassafras, | officinale.                 |
| Gentiana,     |    | quinqueflora.     | Benzoin,   | odoriferum.                 |
| "             |    | crinita.          |            | 88                          |
| "             |    | Saponaria ?       | Dirca,     | palustris.                  |
| "             |    | Andrewsii,        |            | 90                          |
| Menyanthes,   |    | trifoliata, (P.)  | Nyssa,     | multiflora.                 |
|               | 79 |                   |            | 91                          |
| Apocynum,     |    | androsaemifolium. | Comandra,  | umbellata,                  |
| "             |    | cannabium.        |            | 93                          |
|               | 80 |                   | Ulmus,     | Americana.                  |
| Asclepias,    |    | Cornuti.          | "          | racemosa ?                  |
| "             |    | phytolaccoides ?  | "          | fulva.                      |
| "             |    | quadrifolia.      |            | 98                          |
| "             |    | incarnata.        | Euphorbia, | maculata.                   |
| "             |    | tuberosa, (P.)    | Acalypha,  | Virginica.                  |
|               | 81 |                   |            | 100                         |
| Ligustrum,    |    | vulgare.          | Juglans,   | cinerea.                    |
| Fraxinus,     |    | Americana.        | "          | nigra.                      |
| "             |    | sambucifolia.     | Carya,     | alba.                       |
|               | 82 |                   | "          | glabra ?                    |
| Asarum,       |    | Canadense.        | "          | amara.                      |
|               | 83 |                   |            | 101                         |
| Chenopodium,  |    | album.            | Quercus,   | alba.                       |
| Ambrina,      |    | Botrys, (P.)      | "          | bicolor.                    |
| "             |    | ambrosioides.     | "          | tinctoria.                  |
|               | 84 |                   | "          | coccinea.                   |
| Amaranthus,   |    | albus.            | "          | rubra.                      |
| "             |    | hybridus.         | Castanea,  | vesca.                      |
|               | 85 |                   | Fagus,     | ferruginea.                 |
| Phytolacca,   |    | decandra.         | Corylus,   | Americana.                  |
|               | 86 |                   | "          | rostrata.                   |
| Polygonum,    |    | Pennsylvanicum.   | Carpinus,  | Americana.                  |
| "             |    | Persicaria.       | Ostrya,    | Virginica.                  |
|               |    |                   |            | 102                         |
| "             |    | Hydropiper.       | Myrica,    | gale ?                      |
| "             |    | amphibium.        | Comptonia, | asplenifolia                |
|               |    |                   |            | 103                         |
| "             |    | aviculare.        | Betula,    | papyracea.                  |
| "             |    | arifolium.        | "          | excelsa.                    |
| "             |    | sagittatum.       | "          | lenta.                      |



|           |     |                |            |               |
|-----------|-----|----------------|------------|---------------|
| Alnus,    |     | incana.        | Cannabis,  | sativa.       |
| "         |     | serulata ?     | Urtica,    | gracilis.     |
|           | 104 |                | "          | dioica.       |
| Salix,    |     | tristis.       | "          | Canadensis.   |
| "         |     | discolor.      | Pilea,     | pumila.       |
| "         |     | alba.          | Boehmeria, | cylindrica.   |
| "         |     | nigra.         |            | 108           |
| "         |     | Babylonica.    | Pinus,     | rigida.       |
| Populus,  |     | tremuloides.   | "          | strobis.      |
| "         |     | grandidentata. | Abies,     | balsamea.     |
| "         |     | angulata.      | "          | Fraseri ?     |
| "         |     | candicans.     | "          | Canadensis.   |
| "         |     | dilitata.      | "          | nigra.        |
|           | 106 |                | Larix,     | Americana.    |
| Platanus, |     | occidentalis.  | Thuja,     | occidentalis. |
|           | 107 |                | Juniperus, | Virginiana.   |
| Morus,    |     | alba.          | Taxus,     | Canadensis.   |
| Humulus,  |     | Lupulus.       |            |               |

*Endogenous Plants.*

|               |     |              |              |                        |
|---------------|-----|--------------|--------------|------------------------|
|               | 109 |              | Platanthera, | psycodes.              |
| Arum,         |     | triphyllum.  | "            | fimbriata ?            |
| Calla,        |     | palustre.    | Pogonia,     | ophioglossoides.       |
| Symplocarpus, |     | foetidus.    | "            | pendula.               |
| Acorus,       |     | Calamus.     | "            | verticillata.          |
|               | 110 |              | Calopogon,   | pulchellus.            |
| Lemna,        |     | minor.       | Spiranthes,  | latifolia.             |
|               | 111 |              | "            | ceruna.                |
| Typha,        |     | latifolia.   | Goodyera,    | repens.                |
| Sparganium,   |     | Americanum.  | Listera,     | cordata, (R. H. Ward.) |
|               | 112 |              | Cypripedium, | pubescens.             |
| Potamogeton,  |     | natans.      | "            | spectabile.            |
|               | 113 |              | "            | acaule.                |
| Alisma,       |     | Plantago.    |              | 118                    |
| Sagittaria,   |     | variabilis.  | Iris,        | versicolor.            |
|               | 115 |              | Syrinchium,  | Bermudiana.            |
| Liparis,      |     | liliifolia.  |              | 120                    |
| "             |     | Loeselii.    | Smilax,      | herbacea.              |
| Corallorhiza, |     | multiflora.  | Trillium,    | cernuum.               |
| Orchis,       |     | spectabilis. | "            | erectum.               |
| Gymnadenia,   |     | tridentata.  | "            | erythrocarpum.         |
| Platanthera,  |     | orbiculata.  | Medeola,     | Virginica.             |
| "             |     | Hookeri.     |              | 121                    |
| "             |     | hyperborea.  | Polygonatum, | canaliculatum          |
| "             |     | dilitata.    | "            | pubescens.             |

|              |                 |             |                |
|--------------|-----------------|-------------|----------------|
| Smilacina,   | racemosa.       | Streptopus, | amplexifolius. |
| "            | stellata.       | "           | roseus.        |
| "            | bifolia.        | Veratrum,   | viride.        |
| Clintonia,   | borealis.       |             | 123            |
| Allium,      | Canadense ?     | Lugula,     | pilosa.        |
| "            | tricum.         | "           | parviflora ?   |
| Lilium,      | Philadelphicum. | "           | campestris.    |
| "            | Canadense.      | Juncus,     | effusus.       |
| "            | superbum ?      | "           | acuminatus.    |
| Erythronium, | Americanum.     | "           | nodosus.       |
|              | 122             | "           | tenuis.        |
| Uvularia,    | grandiflora.    | "           | bufonius.      |
| "            | perfoliata.     |             | 124            |
| "            | sessilifolia.   | Pontederia, | cordata ?      |

*Sedges.*

|             |             |               |               |
|-------------|-------------|---------------|---------------|
|             | 128         | Scirpus,      | lineatus.     |
| Cyperus,    | repens.     | "             | Eriophorum.   |
| Dulichium,  | spathaceum. | Eriophorum,   | alpinum. (P.) |
| Eleocharis, | obtusa.     | "             | Virginicum.   |
| "           | tenuis.     | "             | polystachyon. |
| Scirpus,    | lacustris.  | Rhynchospora, | alba.         |
| "           | atrovirens. |               |               |

(For the genus *Carex*, see *Wood's Botany*, 1853.)

|        |                |        |                 |
|--------|----------------|--------|-----------------|
| Carex, | sterilis.      | Carex, | scoparia.       |
| "      | bromoides.     | "      | lagopodioides.  |
| "      | cephalophora.  | "      | staminea.       |
| "      | vulpinoidea.   | "      | tenera.         |
| "      | setacea.       | "      | festucacea.     |
| "      | Muhlenbergii.  | "      | mirabilis.      |
| "      | teretiuscula.  | "      | cristata.       |
| "      | rosea.         | "      | aurea.          |
| "      | rosea var.     | "      | caespitosa.     |
| "      | retroflexa.    | "      | strictior.      |
| "      | stipata.       | "      | stricta.        |
| "      | cephaloidea.   | "      | acuta.          |
| "      | sparganoides.  | "      | aquatilis.      |
| "      | disperma.      | "      | crinita.        |
| "      | stellulata.    | "      | paleacea.       |
| "      | scirpoides.    | "      | polytrichoides. |
| "      | curta.         | "      | pedunculata.    |
| "      | sphærostachya. | "      | virescens.      |
| "      | Deweyana.      | "      | hirsuta.        |
| "      | trisperma.     | "      | gracillima.     |

|        |                   |        |                 |
|--------|-------------------|--------|-----------------|
| Carex, | Pennsylvanica.    | Carex, | granularis      |
| "      | Emmonsii.         | "      | eburnea.        |
| "      | Novæ Anglæ.       | "      | debilis.        |
| "      | umbellata.        | "      | areolata.       |
| "      | vestita.          | "      | pallescent.     |
| "      | pubescens.        | "      | undulata.       |
| "      | flava.            | "      | miliacea.       |
| "      | lepidocarpa, (P.) | "      | limosa.         |
| "      | tentaculata.      | "      | hystericina.    |
| "      | intumescens.      | "      | Pseudo-cyperus. |
| "      | folliculata.      | "      | comosa.         |
| "      | lupulina.         | "      | scabrata.       |
| "      | plantaginea.      | "      | Schwenitzii.    |
| "      | anceps.           | "      | retrorsa.       |
| "      | blanda.           | "      | trichocarpa.    |
| "      | conoidea.         | "      | longirostris.   |
| "      | digitalis.        | "      | lanuginosa.     |
| "      | retrocurva.       | "      | filiformis.     |
| "      | Hitchcockiana.    | "      | lacustris.      |
| "      | laxiflora.        | "      | bullata.        |

*Grasses.*

129

|                |              |               |                |
|----------------|--------------|---------------|----------------|
| Leersia,       | " orizoides. | Bromus,       | secalinus.     |
| Alopecurus,    | pratensis ?  | "             | mollis.        |
| "              | geniculatus. | Triticum,     | repens.        |
| Phleum,        | pratense.    | Elymus,       | Virginicus.    |
| Agrostis,      | scabra.      | "             | Canadensis.    |
| "              | vulgaris.    | "             | Hystrix.       |
| "              | alba.        | Aira,         | flexuosa.      |
| Muhlenbergia,  | glomerata.   | Danthonia,    | spicata.       |
| "              | Mexicana.    | Anthoxanthum, | odoratum.      |
| "              | sylvatica.   | Phalaris,     | arundinacea.   |
| Calamagrostis, | Canadensis.  | Milium,       | effusum.       |
| Oryzopsis,     | melanocarpa. | Panicum,      | sanguinale.    |
| Dactylis,      | glomerata.   | "             | capillare.     |
| Glyceria,      | nervata.     | "             | latifolium.    |
| "              | aquatica.    | "             | clandestinum ? |
| Poa,           | annua.       | "             | dichotomum.    |
| "              | pratensis.   | Setaria,      | Crus, galli.   |
| "              | compressa.   | "             | glauc.         |
| Festuca,       | duriscula.   | Andropogon,   | viridis.       |
| "              | pratensis.   | "             | furcatus.      |
| Bromus,        | ciliatus.    | Sorgum,       | scoparius.     |
|                |              |               | nutans.        |



*Cryptogamous Plants.*

|                 |                    |              |                 |
|-----------------|--------------------|--------------|-----------------|
| 130             |                    | Cystopteris, | fragilis.       |
| Equisetum,      | arvense.           | Woodsia,     | obtusa?         |
| "               | sylvaticum.        | Dryopteris,  | Thelypteris.    |
| "               | limosum.           | "            | Novaboracensis. |
| "               | hyemale.           | "            | intermedia.     |
| 131             |                    | "            | dilitata.       |
| Polypodium,     | vulgare.           | "            | cristata.       |
| "               | Phegopteris.       | "            | Goldiana?       |
| "               | hexagonopterum?    | "            | marginale.      |
| "               | Dryopteris.        | Polystichum, | acrostichoides. |
| Struthiopteris, | Germanica.         | Onoclea,     | sensibilis.     |
| Pteris,         | aquilina,          | Osmunda,     | spectabilis.    |
| "               | atropurpurea, (P.) | "            | Claytoniana.    |
| Adiantum,       | pedatum.           | "            | cinnamomea.     |
| Camptosorus,    | rhizophyllus       | Botrychium,  | lunarioides.    |
| Asplenium.      | Ruta-muraria, (P.) | "            | Virginicum.     |
| "               | Trichomanes.       | 132          |                 |
| "               | ebeneum.           | Lycopodium,  | lucidulum.      |
| "               | thelypteroides.    | "            | annotinum.      |
| "               | Filix-foemina.     | "            | dendroideum.    |
| Dicksonia,      | punctilobula.      | "            | clavatum.       |
| Cystopteris,    | bulbifera.         | "            | complanatum.    |

## FAUNA

*Quadrupeds.*

|              |                           |           |                       |
|--------------|---------------------------|-----------|-----------------------|
| Vespertilio, | pruinusos.                | Mustela,  | Martes?               |
| "            | Noveboracensis.           | Putorius, | vison.                |
| "            | Carolinensis.             | "         | vulgaris.             |
| Sorex,       | brevicaudis.              | "         | Noveboracensis        |
| Scalops,     | Canadensis.               | Mephitis, | Americana.            |
| Condylura,   | longicandata.             | Fiber,    | Zibethicus.           |
| "            | macroura, (1)             | Lepus,    | Americanus.           |
| Ursus,       | Americanus.               | "         | Virginianus.          |
| Procyon,     | lotor.                    | Arvicola, | hirsutus.             |
| Vulpes.      | fulvus.                   | "         | albo-rufescens, (2)   |
| Lyncus,      | borealis?                 | "         | Emmonsii.             |
|              | rufus.                    | Mus,      | musculus.             |
| Mustela,     | Canadensis, (Dr. Emmons.) | "         | rattus, (Dr. Emmons.) |

(1) This is probably the animal marked Scalops Breweri, by Dr. Baird, of the Smithsonian Institution.

(2) The A. Albo-rufescens of Emmons, has not been found here so far as we know, since it was described; which indicates that it was an accidental variety.

|           |                     |            |             |
|-----------|---------------------|------------|-------------|
| Mus,      | decumanus.          | Sciurus,   | Hudsonius.  |
| Arctomys, | monax.              | "          | striatus.   |
| "         | monax, (black var.) | Pteromy,   | volucella.  |
| Sciurus,  | lencotis.           | Gerbillus, | Canadensis. |
| "         | vulpinus.           | Hystrix,   | dorsata.    |
| Albino,   | albino.             |            |             |

*Birds.*

|             |                       |              |                    |
|-------------|-----------------------|--------------|--------------------|
| Falco,      | sparverius.           | Turdus,      | migratorius.       |
| "           | columbarius.          | "            | mustelinus.        |
| "           | fulvus.               | "            | minor.             |
| "           | leucocephylus.        | "            | Wilsonii, (A. H.)  |
| "           | haliaetus.            | "            | aurocapillus.      |
| "           | borealis.             | Sylvia,      | coronata.          |
| "           | lineatus.             | "            | acstiva.           |
| "           | peregrinus.           | "            | maculosa.          |
| Strix,      | funerea.              | "            | Blackburniae.      |
| "           | nyctea.               | "            | icterocephala.     |
| "           | asio.                 | "            | castanea.          |
| "           | Virginiana.           | "            | pinus, (A. H.)     |
| Sturnus,    | ludovicianus.         | "            | Canadensis.        |
| Icterus,    | Baltimore.            | "            | trichus, (A. H.)   |
| "           | phoeniceus.           | "            | rubricapilla.      |
| "           | pecoris.              | Regulus,     | calendulus.        |
| "           | agrippennis.          | "            | tricolor.          |
| Quiscalus,  | versicolor.           | Troglodytes, | ædon.              |
| "           | ferrugineus.          | "            | brevirostris.      |
| Corvus,     | Americanus.           | "            | hiemalis.          |
| "           | cristatus.            | Sialia,      | Wilsonii.          |
| Parus,      | atricapullus.         | Emberiza,    | nivalie.           |
| Bombycilla, | Carolinensis.         | "            | Americana, (A. H.) |
| "           | [garrula.             | Tanagra,     | rubra.             |
| Muscicapa,  | tyrannus.             | Fringilla,   | cyanea.            |
| "           | atra.                 | "            | Pennsylvanica.     |
| "           | virens.               | "            | graminea.          |
| "           | Acadica.              | "            | melodia.           |
| "           | Minuta.               | "            | Savanna.           |
| "           | ruticilla.            | "            | hiemalis.          |
| Vireo,      | flavifrons, (A. H.)   | "            | Canadensis.        |
| "           | Noveboracensis.       | "            | socialis.          |
| "           | gilvus, (A. Hopkins.) | "            | pusilla, (A. H.)   |
| "           | olivaceus.            | "            | palustris.         |
| "           | solitarius.           | "            | tristis.           |
| Turdus,     | rufus.                | "            | pinus, (A. H.)     |
| "           | felivox.              | "            | iliaca             |

|              |                       |              |                       |
|--------------|-----------------------|--------------|-----------------------|
| Fringilla,   | cardinalis ?          | Caprimulgus, | Virginianus.          |
| "            | Ludoviciana.          | Columba,     | Carolinensis.         |
| "            | erythrothalma.        | "            | migratoria.           |
| "            | purpurea.             | Perdix,      | Virginiana.           |
| Coccyzus,    | eryophthalmus.        | Tetrao,      | umbellus.             |
| "            | Americanus.           | Ardea,       | herodias.             |
| Picus,       | auratus.              | "            | minor, (A. H.)        |
| "            | pileatus, (J. Darby.) | "            | virescens.            |
| "            | erythrocephalus.      | Totanus,     | semipalmatus, (A. H.) |
| "            | varius..              | "            | chloropygius.         |
| "            | villosus:             | "            | macularius.           |
| "            | pubescens.            | Scolopax,    | Wilsonii ?            |
| "            | Canadensis.           | Rusticola,   | minor.                |
| Sitta,       | Carolinensis.         | Rallus,      | Virginianus, (A. H.)  |
| "            | Canadensis.           | Podiceps,    | cristatus.            |
| Certhia,     | varia.                | "            | rubricollis ?         |
| "            | familiaris.           | Anser,       | Canadensis.           |
| Trochilus,   | colubris.             | Anas,        | obscura, (A. H.)      |
| Alcedo,      | alcyon.               | "            | sponsa.               |
| Hirundo,     | purpurea.             | "            | crecca.               |
| "            | Americana.            | Fuligula,    | clangula.             |
| "            | fulva.                | "            | albeola, (A. H.)      |
| "            | riparia.              | Mergus,      | Merganser.            |
| Cypselus,    | pelasgius.            | Colymbus,    | glacialis.            |
| Caprimulgus, | vociferus.            |              |                       |

## REPTILES.

*Turtles.*

|       |          |            |             |
|-------|----------|------------|-------------|
| Emys, | guttata. | Emys,      | insculpta.  |
| "     | picta.   | Chelonura, | serpentina. |

*Serpents.\**

|             |              |            |                    |
|-------------|--------------|------------|--------------------|
| Eutania,    | sirtalis,    | Ophibolus, | eximius.           |
| Chlorosoma, | vernalis.    | Storeria,  | occipito-maculata. |
| Diadophis,  | punctatus.   | Nerodia,   | sipedon.           |
| Bascanion.  | constrictor. | Crotalus,  | durissus.          |
| Celuta,     | amoena.      |            |                    |

*Batrochians.*

|       |             |       |                |
|-------|-------------|-------|----------------|
| Rana, | pipiens.    | Rana, | sylvatica.     |
| "     | fontinalis. | "     | horiconensis ? |
| "     | halecina.   | Hyla, | versicolor.    |

\*According to Baird and Girard, Catalogue of the Reptiles of the United States.



|             |              |             |             |
|-------------|--------------|-------------|-------------|
| Bufo,       | Americanus   | Salamandra, | salmonea.   |
| Salamandra, | erythronota. | "           | granulata.  |
| "           | dorsalis.    | "           | bilineata ? |
| "           | coccinea.    |             |             |

*Fishes.*

|             |                |            |               |
|-------------|----------------|------------|---------------|
| Perca,      | flavescens ?   | Leuciscus, | cornutus.     |
| Cottus,     | viscosus *     | "          | _____ ?       |
| Catastomus, | Bostoniensis.  | Esox,      | reticulatus.  |
| "           | _____ ?        | Pimelodus, | nebulosus.    |
| Leuciscus,  | argenteus.     | Salmo,     | fontalis. †   |
| "           | atronasus.     | Murena,    | Bostoniensis. |
| "           | atromaculatus. |            |               |

*Shells. ‡*

|          |                          |            |                       |
|----------|--------------------------|------------|-----------------------|
| Cyclas,  | partumeia.               | Helix,     | electrina.            |
| "        | dubia.                   | Pupa,      | curvidens, (J. E. L.) |
| Vitrina, | pellucida, (J. E. Long.) | "          | contracta.            |
| Helix,   | albolabris.              | Bulimus,   | lubricus, (J. E. L.)  |
| "        | alternata.               | Succinea,  | campestris.           |
| "        | monodon.                 | "          | ovalis.               |
| "        | cellaria.                | "          | avara, (J. E. L.)     |
| "        | Sayi.                    | Planorbis, | bicarinatus.          |
| "        | tridentata.              | "          | hirsutus.             |
| "        | striatella.              | "          | deflectus, (J. E. L.) |
| "        | pulchella.               | "          | parvus.               |
| "        | arborea.                 | Physa,     | heterostrophia.       |
| "        | fuliginosa.              | "          | elongata.             |
| "        | thyroidus.               | Limnæa,    | desidiosa.            |

\*The Cottus is quite abundant in our cold streams, and offers the characteristics of at least two species as given in the best monograph; but these differences may be the result of age or sex.

Since writing the above, specimens have been submitted to Dr. Jeffries Wyman of Cambridge, who writes: "They have been compared with those in Prof Agassiz's collection, and prove to be the *cottus viscosus*, which is synonymous with *C. gobio* of Ayers, *C. gracilis* of Heckel, and *Uranoidea quiescens* of De Kay."

† If we have not two species of trout, then the *S. fontalis* presents a great variety of appearances. Some have been taken in the river weighing four pounds. The Baione *fontalis* of DeKay is found here. This probably is the young of the *S. fontalis*. It is so regarded by Professor Agassiz. It has none of the red spots of the trout, and the fry of the trout is sometimes found perfectly marked, smaller than the Baione. This, with several of our small species, needs careful study.

‡ Those not found in Gould's Report, are, according to Binney, (*Terrestrial Moleusks and shells of the United States.*)